Gulf of Mexico Harmful Algal Bloom Bulletin

31 March 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

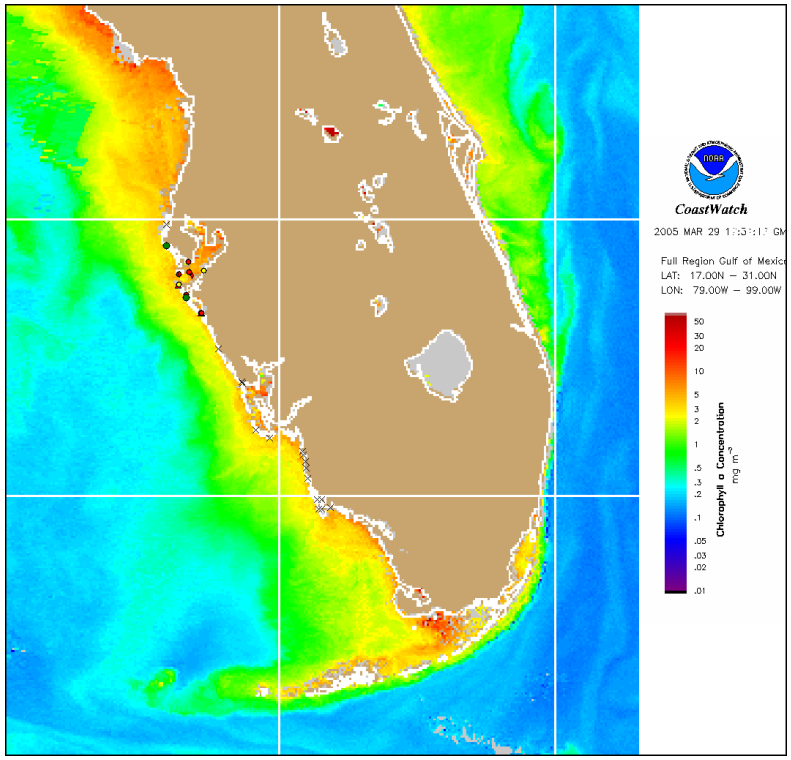
Last bulletin: March 28, 2005

Conditions: A harmful algal bloom has been identified onshore from southern Pinellas to Sarasota Counties. This afternoon through Friday night patchy very low to low impacts in southern Pinellas and Manatee Counties and intermittent very low to moderate impacts in Sarasota County are possible. No impacts expected Saturday through Monday.

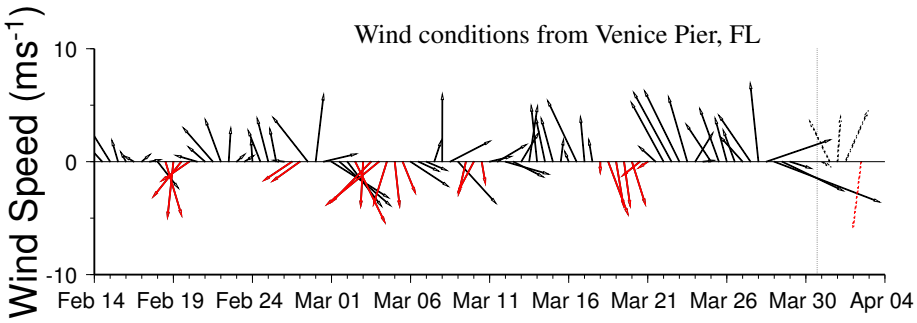
Analysis: A harmful algal bloom persists from southern Pinellas to Sarasota Counties. Chlorophyll levels are elevated along the entire coast of southwest Florida, making exact extents of the bloom difficult to determine. March 30 imagery (mostly obscurred by clouds) indicates chlorophyll levels up to 4.7μg/L outside Tampa Bay at 27°32'N,82°45'W, up to 5.75μg/L southeast of Sanibel at 26°20'N,81°54'W, and near 2.5μg/L offshore of Sanibel at 26°18'N,82°14'W. Imagery obtained March 29 reveals a band of elevated chlorophyll averaging 2-3μg/L from Tampa Bay to Venice, increasing to 4-5μg/L at the mouth of Charlotte Harbor with a maximum concentration of 10μg/L at 26°31'N,82°9'W. As of March 25 manatee mortalities numbered 45, however there is still no confirmation that *K. brevis* is related to these events. FWRI reported no *K. brevis* presence in Collier County as of March 28. No new samples are available elsewhere. Slight southerly and westerly movement of the bloom is possible Saturday and Sunday; further intensification is unlikely.

Keys: Present imagery does not clearly indicate the presence of a bloom in the vicinity of the March 14 medium concentration found north of No Name Key; however chlorophyll levels are elevated up to 2.75μg/L near 24°58'N,81°20'W. Further sampling is needed.

~Fisher & Bronder

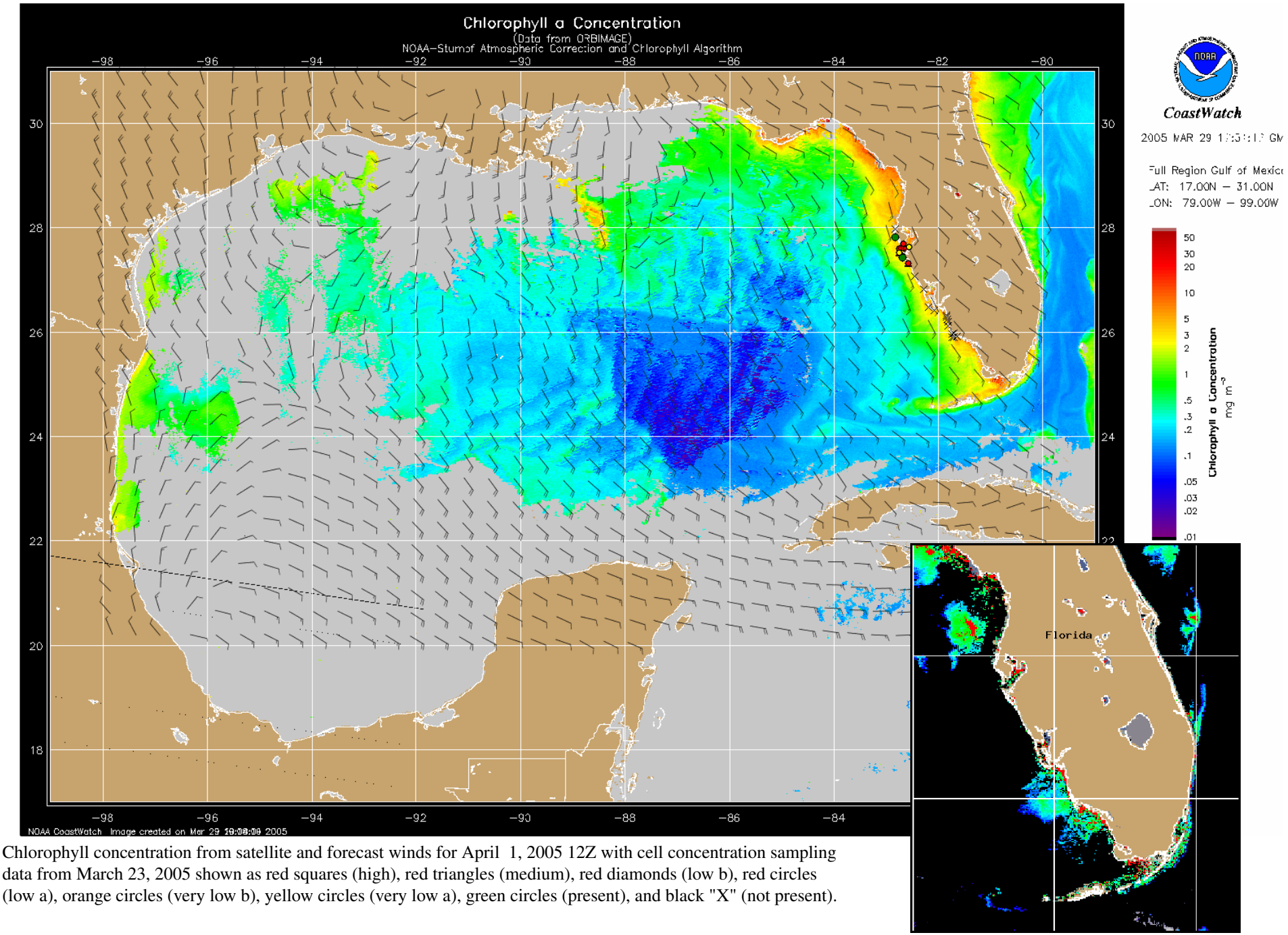


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 23, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Southeasterlies will shift southwesterly at the coast this afternoon (10kts, 5m/s) and return to southeasterlies tonight. Southerlies Friday (15kts, 8m/s)begin clocking around Friday night to the southwest, strengthening to 20kts (10m/s). Strong northwesterlies expected Saturday, turning northerly at night and weakening to 15kts. Northeasterly winds (15kts) on Sunday will shift easterly Monday at 10-15kts.



Chlorophyll concentration from satellite and forecast winds for April 1, 2005 12Z with cell concentration sampling data from March 23, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis and image for interpretation)

Wind conditions from Sand Key, FL